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Evolved Expendable Launch Vehicle Program Fact Sheet

The Department of Defense established the Evolved Expendable Launch Vehicle (EELV) program to fulfill the pressing national need for a lower-cost, more reliable national space launch system. EELV is a top priority, U.S. Air Force program that will develop modern rocket technology to design and build a family of expendable, or non-reusable, rockets to replace the aging Delta, Atlas and Titan. The government's current expendable rockets are based on 1950s technology and are expensive to build and operate. The EELV may be a new design of the existing boosters, or a new design based on current technology. Some aerospace companies bidding on the project may propose using Russian-designed rocket boosters. The EELV will be designed to place payloads weighing from about 2,500 pounds to 45,000 pounds into a low-Earth orbit with the goal of cutting the cost of rocket launch vehicles from 25 percent to 50 percent.

The John C. Stennis Space Center (SSC), Hancock County, Miss., NASA's lead center for rocket propulsion testing, will conduct technology demonstration tasks and engine and system testing. EELV activity at SSC began in May 1996 and is expected to continue through at least 1999. Existing test facilities at SSC will allow EELV contractors the opportunity to utilize propulsion test facilities.

SSC's consolidation of propulsion test facilities provides the nation with the most economical and efficient path to cheaper, more routine access to space. SSC has six facilities that are used for propulsion-related testing. Three large test stands have been used to test the Space Shuttle Main Engines since 1975. The stands were originally built in the early 1960s to test the first and second stages of the Saturn V rocket that safely transported Americans to the moon. Other facilities at SSC offer unique capabilities, such as testing individual rocket components and turbopump machinery, as well as materials for future hypersonic aircraft.

The Air Force's Missiles & Space Division selected four contractors in August 1995 to refine concepts and designs and to test the key technologies needed to build an EELV. The downselect to two contractors is expected in December 1996.

Each contractor will receive $65 million for a 17-month performance period to continue refining their EELV designs. Final contractor selection is expected in mid 1998. The winner will receive $1.6 billion for an eight-year performance period to prove their full manufacturing capability. Two low risk payload

flights to demonstrate the system will occur in the year 2000, and a single heavy lift flight planned for 2003.

The Evolved Expendable Launch Vehicle Program is a $2 billion Department of Defense program that will focus on using existing technology, foreign and domestic, to develop a family of expendable launch vehicles capable of replacing the current medium- and heavy-rocket fleet. Its objective is to make space launch more affordable, reducing the total cost of launch to the nation.

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Return to Stennis Fact Sheets